

Abstract

A traction improvement system for an over-the-road vehicle includes a traction improvement module that sense vehicle hydroplaning and activates ultra-sound wave emitters to disrupt water surface tension in proximity to the tire when hydroplaning is sensed. The emitters direct ultra-sound waves onto the road surface as well as on the tire tread. An optional traction enhancing agent dispenser dispenses deicing solution or grit in proximity to the tire to further enhance traction.